

# *Leica* **PHOTOGRAPHY**

Volume 8 Number 3

Fall 1955 25¢







# Leica

# PHOTOGRAPHY

VOLUME 8

NUMBER 3

FALL 1955

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## IN THIS ISSUE . . .

ALFRED EISENSTAEDT...HORIZON: PEOPLE . . .	4
<i>by Minor White</i>	
MORE ABOUT ADOX KB-17 AND KB-21 FILMS . . .	8
<i>by Charles I. Hellman</i>	
SHOOTING WITH A NEW "BIG GUN" . . . . .	11
<i>by Mike Tatem</i>	
SOME PRACTICAL TIPS ON ANSCOCHROME . . .	14
<i>by Kenneth S. Johnson</i>	
THE 25th ANNIVERSARY EXHIBIT OF ALFRED EISENSTAEDT . . . . .	16
<i>by Minor White</i>	
SALON SECTION . . . . .	17
NOW! LEARN "35mm. MAGIC" FROM WALTER BENSER . . . . .	21
<i>by Kenneth Poli</i>	
WIZARD OF THE GADGET BAG . . . . .	22
<i>by Norman Rothschild</i>	
TRICKS WITH THE BELLOWS DEVICE . . . . .	24
<i>by Joseph Foldes</i>	
WE TAKE 10 PICTURES A MINUTE . . . . .	28
<i>by Fred Anderegg</i>	
SIDE LEITZ . . . . .	30



Cover by Alfred Eisenstaedt  
III f, Telyt 400mm.  
f/5.6 at 1/50th, Daylight Kodachrome

### "MONDAY'S CHILD"

LEFT: by Norman Rothschild  
Leica M 3, Summicron 50mm.  
f/5.6 at 1/100th on KB-17 with FR X-22

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The editor will be pleased to consider original articles and photographs on Leica camera photography. All manuscripts should be accompanied by stamped, self-addressed return labels.

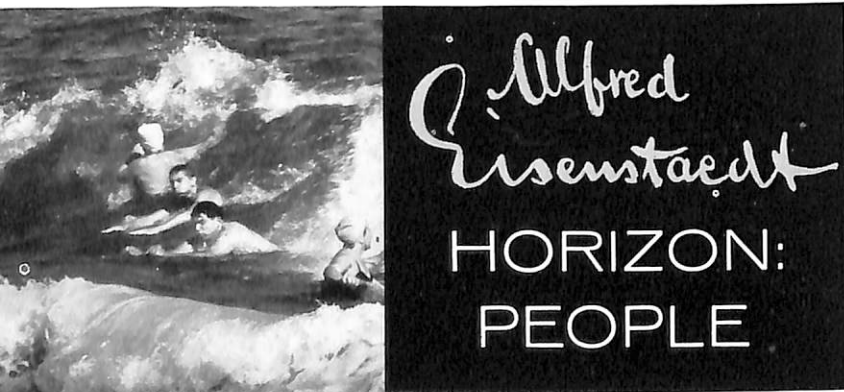
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LONELINESS OF COMMAND is eloquently expressed by this duskshot of the captain of the Queen Elizabeth on the flying bridge.



RESIGNATION, half-wistful, half-humorous, on the face of this Italian hack driver, lends a touch of caricature to this picture.



*Ed. Note: In this article, and the one on p. 16, all illustrations are photographs by Alfred Eisenstaedt, © Time, Inc., with the exception of the picture of Eisenstaedt in action. We have tried to choose some of Eisenstaedt's most forceful shots, but those which you have not seen time after time in other publications.*

## Many Pictures Working Together . . .

Minor White

Assistant Curator  
George Eastman House, Inc.  
Rochester, N. Y.

Should we distinguish the man from his photographs? With some photographers such a cleavage can be made, but not with Eisenstaedt. When he brings his camera to his eye, he is most himself; his photography is his foreground, his middle ground and his distance; seeing is his life. We have learned to call such men dedicated.

How does such a man start in photography? The point is always interesting, and, in Eisenstaedt's case, prophetic. He was given a #3 Folding Kodak for his 12th birthday in 1910. But since cameras for a birthday gift are nearly as universal as a baby's first tooth, we can hardly say that this event began his photographic career.

### Discovery

It really started in 1928 when a friend showed him some enlargements of snapshots. Delighted, excited, he pursued the enlargement. It seems that ears and noses first caught his fancy. Or so the story goes. And with all his abundant energy channeled on enlargements of noses and ears, his friends and family soon scattered at the sight of Alfred. Since then, his main interest has always been people. When we look at Eisenstaedt's life before he discovered enlargements, there is little to show that his destiny was photography, that someday he would be one of the men to make photojournalism what it is today. At the time of the discovery he was selling belts and buttons, a job he abhorred. But he had to help support his family, which had lost its department store fortunes in Germany's post-World War I inflation. During the war he had been wounded twice by shrapnel. Somewhere in all this the seed of his destiny had been formed. When we look at the whole range of Eisenstaedt's photography we can see, mutually interdependent, the fulfillment of the destiny to be a photoreporter and the effects of circumstance



on the subjects of his pictures. The places he has been, the assignments he has been given have a profound effect on his actual subject matter. Indeed, they probably dictate it.

### *Beginnings*

From 1929 until 1934 he photographed in Europe, mainly as a free-lancer for The Associated Press. He made thousands of negatives, and out of them a period in history can be reconstructed with an amazing degree of completeness. Between wars, an opulent segment of society sought to recapture the gaiety and luxury of a way of life that had disappeared. Amid left-over elegance, the face of Europe glittered before Eisenstaedt's camera. Also, between wars a bankrupt spirit fermented finally into barbarism. This he also recorded with candor. One gets the idea of an ubiquitous eye, a vast hunger for all of life. Though he photographed all classes of society, Eisenstaedt's was an eye that recorded all but was spokesman or protagonist for none. This is his conceptual contribution to photojournalism—to record with deep understanding but without comment. We do not imply that he alone held this ideal, or that he was solely responsible for it. The documentarians, for instance, as a group held the same goal. They, however, were rarely as able to refrain from comment. But it is a goal central to Eisenstaedt, natural to him, characteristic of all his work.

### *The Picture Story*

Another of Eisenstaedt's contributions is the idea of the picture story. This he evolved early in his career. Instead of using one picture that might sum up a situation, he learned quickly how the miniature camera could help the reader reach the living presence. He used many pictures working together to reveal the whole of an action. Experience of an entire situation via photographs was a relatively new idea in the early thirties and thus, very exciting. It is still a prevalent power in photoreporting.

In 1935, just before Italy invaded Ethiopia, The Associated Press sent Eisenstaedt to the scene. It seems that nothing escaped his camera: Emperor Haile Selassie, barefoot infantrymen, barefoot telephone line repairmen, barefoot cavalry men on maneuvers, priests, regular and irregular soldiers, and many other ordinary and extraordinary citizens.

It seems as if nothing was omitted, as if one could build from the pictures alone a complete story of a people under stress. Eisenstaedt returned to Ethiopia in 1955 and from these new pictures we can see not only a people, but also the land as their environment.

The effect of his assignments in recent years to Dutch Guiana to photograph the Tropical Rain Forest, to Florida to photograph Everglades wildlife and many others, was felt and seen in his coverage of a country. Eisenstaedt has stated, with his own kind of endearing bluntness, that a photographer must come into a room radiating an "aura of authority." Who wouldn't raise both eyebrows and objections to such a statement? Photojournalists are supposed to report what happens, not what they make happen. Or, so we have been led to believe. And here is a man claiming just the opposite. But Eisenstaedt (equally famous for his candid and unobtrusive approach) advises that when the situation allows a "disappearing act," then vanish. Apparently there are other times when a photographer walks into a room that the normal train of events is derailed. In this situation it is his job to put everything back on the track again. He alone can do it. Everyone *expects* him to direct. But here is the trick that is both characteristic and critical to the photoreporter: *he must want them to do exactly what they would have done if he had not appeared on the scene.* What separates the photoreporter from photographers in other fields is his ability to, not recreate, but *reestablish*, when he must, the flow of a situation. It is his responsibility to the public he serves. Eisenstaedt recognizes the responsibility and masterly fulfills it.

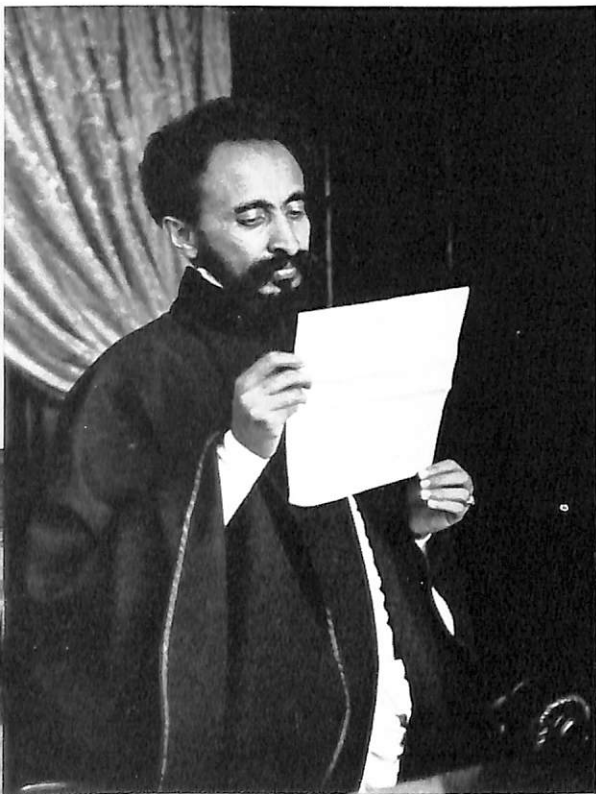
### *America*

Late in 1935 Eisenstaedt left what had become Hitler's Germany and came to America. He was surprised to find that his reputation had preceded him. *Vogue*, *Harper's Bazaar*, *Town and Country* sought his photographs. He joined Time, Inc. and worked on the experimental magazine that became *Life* in 1936. He has been a staff member of that magazine ever since. His work in Europe had ranged widely, from dukes to dugouts, politicians to mill hands—probably because in a youthful enthusiasm he found everything interesting. If he made a specialty of anything it was in *not* being specialized. As a staff member he set up an ideal of the staff photographer who could perform any assignment brilliantly. This would be the ideal professional approach of the journalistic photographer. And it is difficult to attain, as are all ideals. The limitations of the human being interfere. A man cannot help but be sympathetic in one area and indifferent in another. Eisenstaedt probably comes closer to this ideal of versatility than any other photographer.

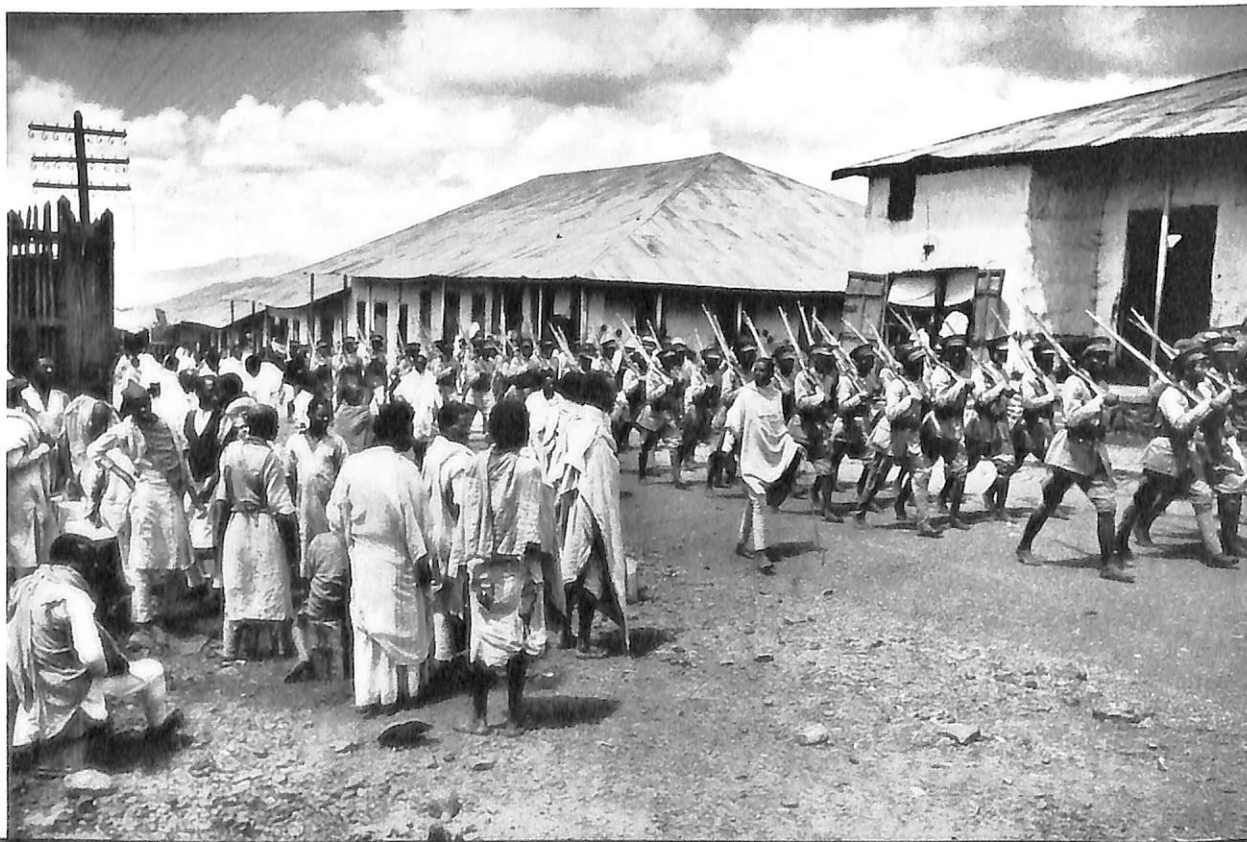
Assignments keep piling up at an astonishing rate year after year; they number in the thousands. As someone said of him, he is making a career of a million negatives. In spite of the be-

REGAL MIEN of Haile Selassie's chief hunter is enhanced by Eisenstaedt's choice of a low angle.

DIGNITY of Haile Selassie, Emperor of Ethiopia, was first caught by Eisenstaedt while on a 1935 assignment.



ELOQUENT STREET SCENE in Ethiopia, 1935, tells the story of that country's side of the war with Italy far better than statistics could.





wildering diversity of his assignments, he still stamps his personality on many of the photographs. Formality of arrangement is one way he does it. For instance, student nurses sitting in rows watching an operation, or one or two figures against a huge wall of windows at the foot of an imposing staircase.

### *Shooting For Publication*

His characteristic way of seeing became a part of the style of *Life*. You do not realize how much a part, until you have looked at a huge quantity of his photographs without benefit of the magazine page around them. You feel that only layout and text have been omitted. It is then that you realize abruptly and vividly that he photographs for the page! He has worked for publication so long that he has the printed page in mind, if not consciously, then habitually. And, of course, he works for covers. So far, 53 are already to his credit.

Since World War II, Eisenstaedt has been a constant world traveler. So, when he is in town long enough to listen, you ask him the logical question, hoping he will have time to answer it the next time he is back. Does the speeding photoreporter who stays in one place but a few hours, covering a nation in a few weeks, *really* find all the facts and does he actually uncover all their significance? Eisenstaedt says, "Yes," in a practical way. No man is going to say that he gets every fact and misses no significance. That would be boasting. But from a practical standpoint, he feels that he gets more than a local photographer could, because the latter, blinded by habit and immunized by closeness, sometimes overlooks the obvious. And it is in the obvious that the story can best be told to those who will never be able to visit the scene for themselves.

He explains further that the mind of the photoreporter has to be fast. It must naturally grasp things quickly. Furthermore, natural talent is enhanced by years of practice. Situations repeat themselves, so that he does not have to learn anew each one he meets. But in spite of repetition, with Eisenstaedt every assignment is a creative experience.

### *The Photoreporter's Approach*

The first part of this is seeing the details from which the pictures must be constructed. Sometimes the material has few picture possibilities. Yet the photoreporter must work hard, knowing that there will be no reward of powerful or spectacular photographs. If the material is exciting in itself, then he is fortunate. One of the distinctions between the "artist" photographer and the

photoreporter is that the latter takes pictures regardless of the formal possibilities, while the former selects only the possible picture situations. The second part is to capture those significant details that will unfold the story and then the obvious photographs that will orient that story in its environment. This adds up in him to a total emotional experience with a beginning, a middle and an end. Once he has encompassed a situation both with his mind and his camera, the experience is finished, for he seldom sees the pictures till weeks or months later.

To make the moving, vital photographs that are his hallmark, Eisenstaedt chose the Leica 25 years ago. But he still cautions that, should it fail to fill his camera needs, he might well work with another tool. And he feels he must be free of his tools. He says this while acknowledging his dependence on a specific camera. At the same time he retains the right to feel that he is its master. This is a sense of freedom that any creative person must be able to exercise.

### *Eisenstaedt And People*

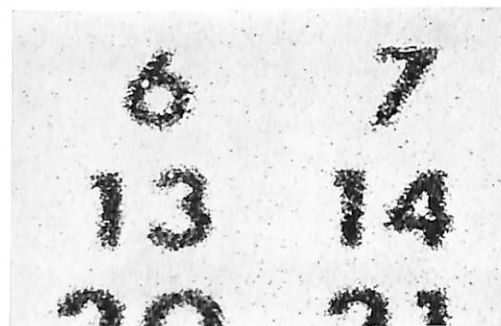
When it comes to people as individuals, Eisenstaedt seems to be at his best. He loves them, regardless of who or what they are. People are still his favorite horizon. A Japanese scholar observed about photography some 75 years ago that it would enable unborn generations to "rub elbows" with the philosophers that he knew. And this is true of the best of Eisenstaedt's portraits of the great men of our time. We can say of them, "So this is what they were like." Higher praise cannot be accorded the photographer.

### *Photography As A Way Of Life*

Perhaps a little story will illustrate to what extent Eisenstaedt has come to live via seeing. He says that if Marlene Dietrich were to drop something in his presence, unlike others, he would put his camera to his eye. Because while she picked it up herself, he might get his greatest photograph. But watch that we are not misled by his term "greatest." He is interested, yes. But if we think that he is concerned ultimately only with exciting pictures, we can be most mistaken. His surface mind may think in terms of the magazine page, but his underneath mind comes to life when his camera comes up to his eye. From the moment that the object would be dropped he would live through his eyes the entire experience. He would participate through his viewfinder. He would want a successful, or as he says, "great" photograph. That he *must* want. When a man's life and his photographing become one and the same thing, to fail as a photographer is to fail as a man.



ELECTRONIC FLASH with KB-17 gave guide number of 100 without overdevelopment with a 75 watt-second unit. Extreme close-up of calendar numerals is a 100X linear enlargement made by blowing up a 33 $\frac{1}{3}$ X photomicrograph exactly three times. Summicron, f/11, FR X-22.



Charles I. Hellman

Yonkers, N. Y.

High-resolution films, with basic limitations, have been made in the past. They were very slow and often so contrasty that they were suitable only for microfilming line work. The problem was to formulate a high-resolution film with useful speed and gradation.

Recent discoveries in film sensitization methods have made possible great increases in film speeds. This has led to the marketing of very sensitive film of normal resolution. Increased speed, however, can be applied with other objectives: to make faster fine-grained high-resolution emulsions. And to make the emulsion thin enough to reduce light spread of image points. These objectives have been reached in Aadox KB-14, KB-17, and KB-21.

**KB-14** (Exposure Index; 16 Daylight, 12 Tungsten) is a panchromatic film with ultrafine grain and highest resolving power. It permits great enlargement with extreme sharpness.

**KB-17** (Exposure Index; 32 Daylight, 25 Tungsten) a medium speed panchromatic film for all-around outdoor use and flash photography. It combines extremely fine grain and excellent gradation.

**KB-21** (Exposure Index; 80 Daylight, 64 Tungsten) a high speed panchromatic film for difficult light conditions. It has fine grain, high speed, and long tonal scale.

Listed exposure indexes are based on sensitometric determinations and are for use with meters calibrated in the ASA system. In practice, you may want to modify these indexes.

High Resolution With High Speed

## MORE ABOUT ADOX

### Which Aadox Film To Use?

To help you select the best Aadox film for your needs, I have tabulated the three films with recommended applications. KB-14 is uniquely suitable for work demanding the highest resolution and was treated in detail in the Summer 1955 Issue of LEICA PHOTOGRAPHY.

KB-17 is the most versatile of the three emulsions. Its speed is adequate for most exterior conditions in daylight and for interiors with controlled illumination. Any of the recommended developers will produce a graininess low enough for most applications. The resolution is outstanding and enlargements made from this film retain a crispness that is a revelation. The latitude of KB-17 in regard to exposure and development is greater than that of KB-14.

KB-21 is a high speed film that will find its widest application under difficult light conditions. Its graininess is surprisingly low and the resolution high for such a fast film. In addition, the soft gradation is advantageous since it will tend to flatten harsh lighting contrasts often met with in existing-light pictures. This film will also be useful in poor daylight where short exposures are required, and in available light.

Recommendations For Use Of Aadox Films				
Subject	KB-14	KB-17	KB-21	
Sports or _____ Exteriors		x	x	
Other Action _____ Indoors or Poor Daylight			x	
Portraits _____ Daylight	x	x		
_____ Available Light			x	
_____ Controlled Artificial Light		x		
Stage Photography _____			x	
Architecture _____ Exterior	x	x		
_____ Interior or night		x		
Candid _____ Daylight		x		
_____ Available Light			x	
Flash _____ Electronic	x	x		
_____ Expendable		x		
Landscapes _____	x	x		
Aerial Photography _____		x		
Photomurals _____	x			
Photomicrography _____	x	x		
Macrophotography _____	x	x		
Copying _____ Controlled Illumination	x			
_____ Available Light		x		
Still Life _____	x	x		
Nature Photography _____ Insects		x		
_____ Animals		x		
_____ Flowers	x	x		
TV Picture Tube _____		x	x	



# KB-17 KB-21 FILMS

## *More About The Table*

**Electronic Flash:** KB-17 is a good choice for electronic flash. I got a guide number of 100 with a 75 watt-second unit without overdeveloping.

**Photomicrography:** The higher contrast of KB-14 will aid you in working with low contrast slides. However, the greater latitude of KB-17 will make it easier for you to get a good photomicrograph when you're not sure of the exposure.

**Copying:** You will find KB-14 very fine for copying under controlled lighting. However, you may often find it necessary to copy documents or book pages under available light. Here the exacting film requirements of high resolution and medium speed are supplied by KB-17. With the BOOWU attachment and KB-17 in your camera, you can make rapid copies of text pages under available light. Naturally, the results will not be equal to those obtained with controlled lighting. But when there is no alternative, available light copying will save you hours of laborious copying by hand.

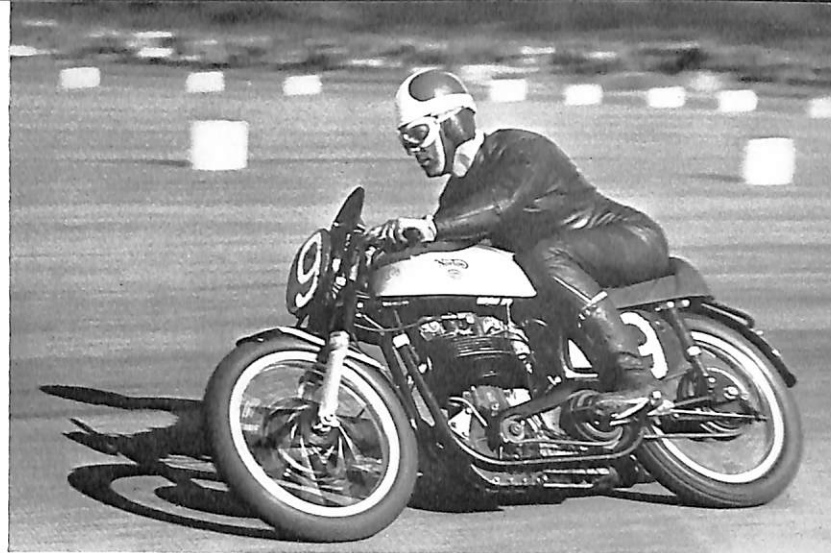
**TV Picture Tube Photography:** The exposure will vary over a wide range, depending on the brightness of the kinescope image. Adjust the picture for brightness and contrast until you get a good range of tones in a darkened room. The blacks should show some detail while the whites should not be chalky. Darken the room, since reflection from the front of the picture tube will degrade the image quality.

I would suggest that your trial exposures with KB-21 cover  $f/2.8$ ,  $f/4$  and  $f/5.6$  at  $1/25$ th second.

**KB-14 vs. KB-17:** In several instances both KB-14 and KB-17 are recommended for the same subject. Make your choice according to the film speed you need. Thus in flower photography you can use KB-14 if the subject is still. On a windy day you may need KB-17's speed to minimize subject movement. The slower speed of KB-14 will be a help when using flash for close-ups. It will help you to avoid overexposure.

## *Exposure*

For consistently good results use a reliable photoelectric exposure meter. For close-up or medium-distance work outdoors, I prefer incident light reading. The reflected-light method is also good



KB-17 has plenty of speed for fast action outdoors. Speeding cycle is caught without blur, yet shadows and texture are full of detail. IIIf, 85mm. Summarex,  $f/2.8$ ,  $1/500$ th second in Promicrol.

if you measure the brightest and darkest important parts of the subject and then set the arrow of the calculator midway between the two readings.

And I suggest that you always use a photoelectric meter indoors. Since there is generally wide variation in light in different parts of a room, use a reflected light meter close up on the subject. Don't use it from camera position pointed towards the subject. Your reading will be unduly affected by light variations over different parts of the room. An incident light reading at the subject, with the photo cell pointed towards the camera, will also produce a reliable reading.

I have found that my average exposure with KB-17 during the greater part of the day in clear sun, front-lighted, has been  $f/8$  at  $1/200$ th. In open shade, my average exposure has been  $f/5.6$  at  $1/100$ th second.

## *Exposure Indexes*

The exposure indexes listed are based on sensitometric determinations and are for use with meters calibrated in the ASA system. They are, therefore, conservative (a safety factor is included). What's more, the sensitometric method involves gradient determination over the toe and adjacent straight-line portion of the characteristic curve of the film. Developers of the FR X-22 and Neodyn type which produce higher gradients in the toe or shadow portion, but lower gamma because of the compensating action, produce higher effective speeds. (See Summer 1955 Issue of LEICA PHOTOGRAPHY: X-22, A New Developer For Adox Film.)

I have found that the following meter settings produce excellent negatives, with good shadow detail, when developed as indicated:

Adox KB-17 developed in X-22:

Daylight 64 Tungsten 50

Adox KB-21 developed in Finex-L:

Daylight 160 Tungsten 125

### Which Developer For KB-17?

KB-17 has a grain structure so fine that you can use very active, moderately fine-grain developers, which do not etch away image-forming silver during the development process. Result: negatives that have highest emulsion speed, maximum resolution, and low graininess. FR X-22 and Neodyn Red are developers of this class. They are strongly compensating, preserving shadow detail while minimizing highlight blocking.

You will also get excellent gradation and resolution from a second class of developers, which have only slight silver solvent action. These developers produce finer grain than the compensating developers described above. However, this will be of importance with KB-17 only when you expect to make extreme enlargements. Some developers of this class are: Promicrol, P-60, X-22, Microdol, Minicol, Finex-L and 777.

These developers vary in their effect on emulsion speed of the film. The best rating will be between 32 and 64 for a setting on the ASA-calibrated meters.

### Which Developer For KB-21?

KB-21 has fine grain for a film of its sensitivity. In order to maintain its grain structure it should be processed in a fine-grain developer. All the developers listed in Class 2 for KB-17 are also very suitable for KB-21, except for Minicol, which is too soft-working with the faster film. The effective emulsion speed for KB-21 will vary from 80 to 160 depending on the developer and your preference in negative density. As an indication of results you may expect, I have found a meter setting of 160, Daylight, very suitable for KB-21 developed in Finex-L.

### How About The Borax Developers?

Metol-hydroquinone-borax developers produce rather high contrast when used with KB-17. Use them only when the higher contrast is desirable as in copying or increasing the contrast of a low than Class 2 developers, and the borax developers are not recommended for KB-21. D-76 and Normadol are typical packaged borax developers.

REMARKABLE PERFORMANCE of KB-21 shows in indoor shots by fluorescent light. Shot at Exposure Indexes of 80, 160 and 320 respectively, each was printed on No. 2 paper. All are good, but paper with greater degree of contrast would give better results with shot rated 320.

### Processing KB-17 and KB-21

Film processing is straightforward. Developing times for many well known developers are given in the table below. The short-stop bath, fixing, and washing steps are the same as with other films. It is important to keep all solutions used after developing within 5°F. of the developer temperature. This will prevent possible reticulation.

Development of <b>KB-17</b> (at Exposure Index of D.32, T.25) and <b>KB-21</b> (at Exposure Index of D.80, T.64) for normal contrast subjects, except where otherwise indicated.*		
Developer	KB-17	KB-21
Time at 68°F.-70°F. (20°C.-21°C.) with 5 seconds per minute agitation		
FR X-22*	8-10 minutes	Not recommended
Neodyn Blue*	20-24 minutes	Not recommended
Neodyn Red*	12-16 minutes	Not recommended
Adox E-10*	11-14 minutes	Not recommended
Agfa Rodinol*	10-14 minutes	Not recommended
Developers For All-Around Use For Soft Gradation And Very Fine Grain		
May & Baker Promicrol	8-10 minutes	10-12 minutes
Clayton P-60*	8-10 minutes	12-14 minutes
FR X-33*	10-12 minutes	11-13 minutes
Kodak Microdol*	10-12 minutes	10-12 minutes
Edwal Minicol	8-10 minutes	Not recommended
Harvey's 777	6- 8 minutes	12-14 minutes
Finex-L	7- 8 minutes	8- 9 minutes
Edwal-20	10-12 minutes	12-14 minutes
Developers Giving Higher Than Normal Negative Contrast. Grain Will Exceed That Obtained With Developers Listed Above.		
Kodak D-76	10-12 minutes	—
Anso Normadol	10-12 minutes	—
Neodyn Red*	12-16 minutes	—

\*See manufacturer's instructions for dilution and exposure data.

### Looking Ahead

Miniature camera users now have in Adox films a recording medium that does justice to precision equipment. Advances in optical design and glass have made possible the assembling of lenses of improved definition. This precision now extends to the negative when you use the new thin-emulsion films.





# SHOOTING WITH A NEW "BIG GUN"

**125mm. Hektor f/2.5 Tops For Many Jobs**

**Mike Tatem**

Photographic Illustrator  
Columbus, Ohio

Are you one of those Leica photographers who has never been quite satisfied with a lens for portraits? If so, you'll be glad to hear about my experiences with the new 125mm. Hektor f/2.5.

This lens is a modified triplet, with an acceptance angle of 20 degrees—unique in its speed and versatility. It adapts well to medical work, portraits, fashion, industrial, texture, available light, commercial, architectural detail, sports, animals, children, still life, figure, and illustration. What's more, you can take the lens out of its focusing mount, making it possible to insert it in the #16,572 adapter for use on the Bellows for extreme close-up focus as well as infinity.

## *Has Sharpness Of Summicron*

Although lenses of this focal length and aperture are generally somewhat on the "soft" side, it may interest you Summicron users to know that you now have available a long lens of comparable quality. I have used and tested several of the Hektors (including optical bench tests and resolving power tests on the Bureau of Standards test charts) and have found them in every case to closely approximate in definition and corner coverage what we have learned to praise in the Summicron. Surprisingly, the lens still holds good definition wide open at f/2.5. I was very pleased with my f/2.5 shots. But for most critical definition use f/5.6 to f/8. Little loss of definition results when you stop down further. Although most of my own shooting to date with the lens has been in black-and-white, I am equally enthusiastic over the color quality. I found a definition and color separation not previously found in lenses of this type. And, contrary to general belief, the lens is *definitely not soft*.

## *Bench Tests*

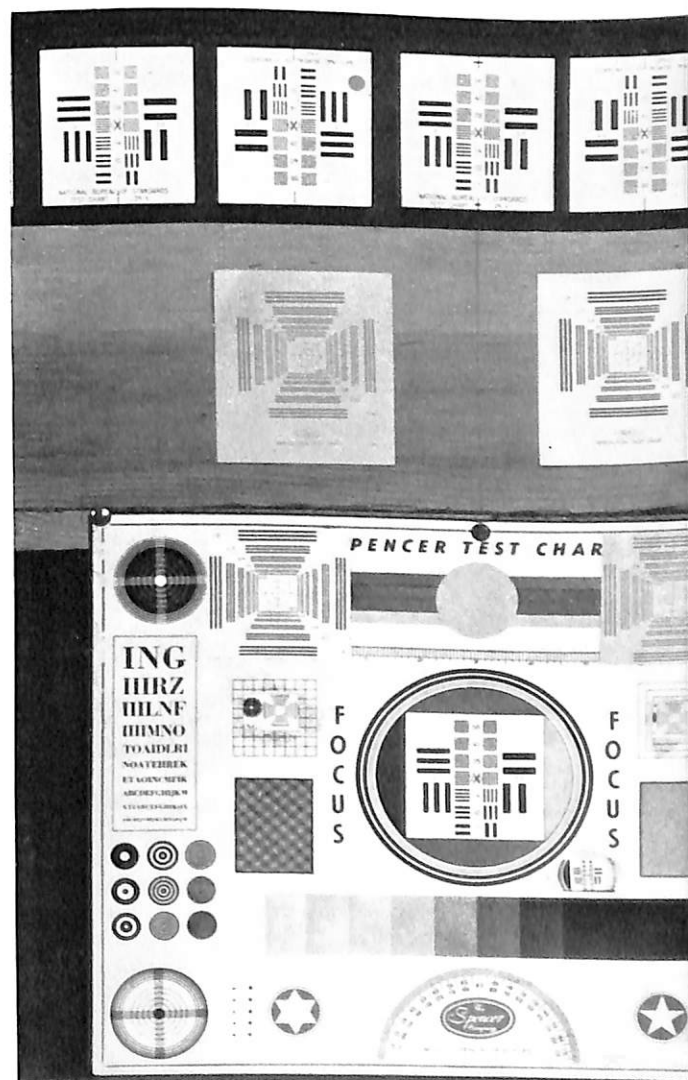
While testing and using the 125mm. Hektor, I have frequently been asked for more technical information about it. So for those of you who want it, I am including some. But I've kept it to a minimum, because you don't need long-hair facts to be able to get eye-catching shots with this new lens.

In the early stages of trying several of the lenses, I was lucky to get help from Dr. Rudolph Edse, Associate Professor in the Aeronautical Engineering Dept. of Ohio State University. He kindly offered his help and facilities for bench testing the lenses. His tests revealed that even at full aperture, there was very little flare in the lens and that contrast was excellent with absolutely no color fringes!

I have photographs taken as resolving power tests on the Spencer test charts and the U. S. Bureau of Standards charts. These resolv-



*Ed. Note: The author is a well-known illustrator and author of "Paris, Perhaps" and other books.*



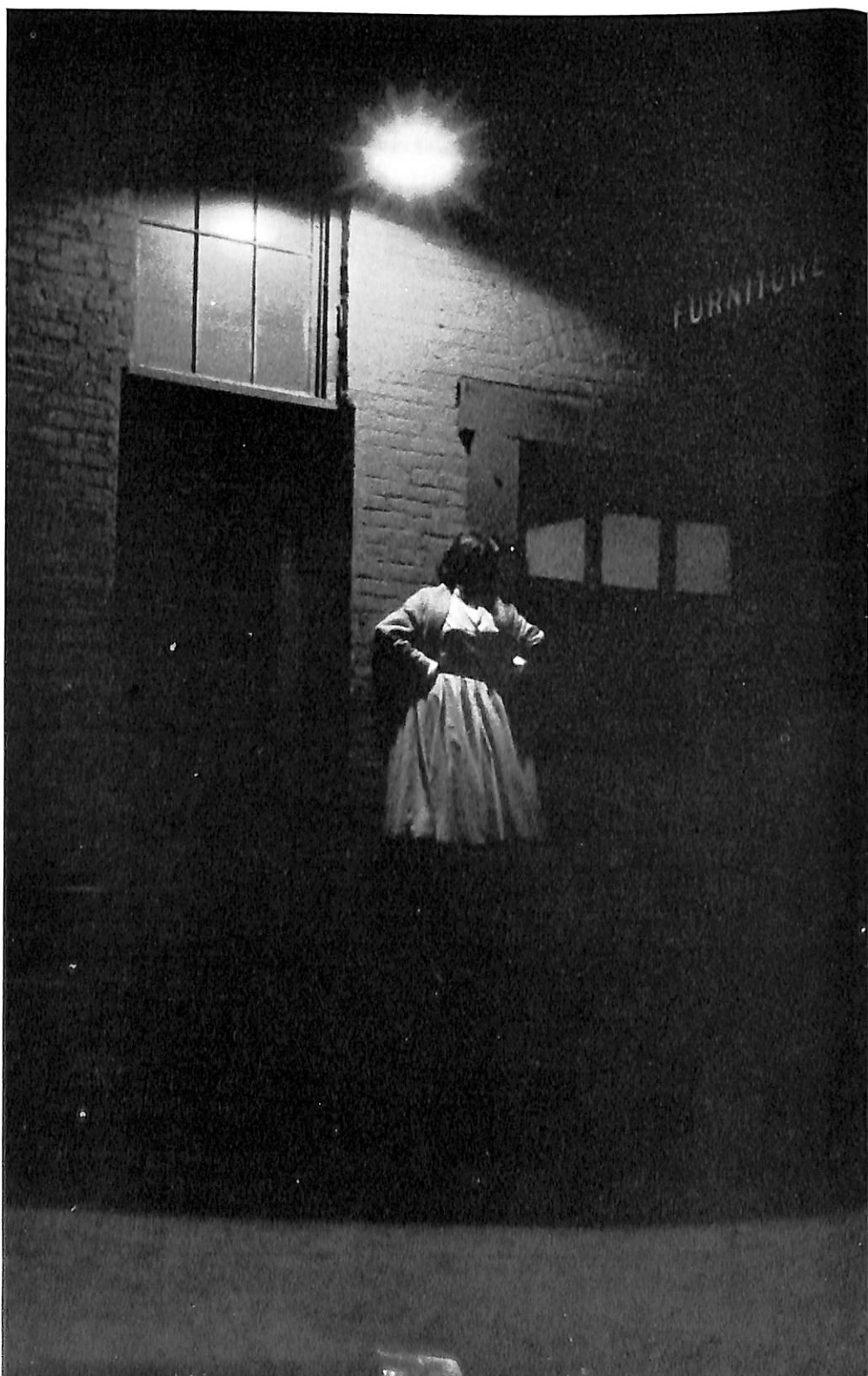
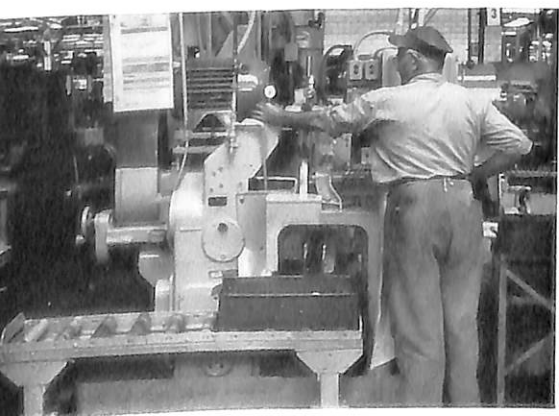
WIDE OPEN, the new 125mm. Hektor f/2.5 gives this picture of test charts at enlargement of 8-10 diameters. Transition from original to halftone engraving has caused considerable loss of detail, but notice good contrast and resolution. Film was Pergrano.

**THEATER.** New Hektor "reaches out" for action. Photographer need not disturb actors. Super XX Index of 500; f/4 at 1/25th.

**CANDID.** Subjects stay unaware of camera; long-focus lens allows photographer to keep back, yet get big image. F/11 at 1/50th.

**EXISTING LIGHT.** Wide aperture and long focus are unbeatable combination for interesting street scenes at night. F/2.5 at 1/10th.

**INDUSTRIAL.** Big Hektor works well for industrials. Detailed plant scene is on KB-17, f/16 at 8 seconds with strobe fill light.







GLAMOUR. Long focus gives dramatic closeup with no distortion.

ing power tests were made for the 125mm. f/2.5 Hektor at its wide open aperture, and also at f/4 and f/8 for comparison. At this point I would like to call to your attention that all tests were made with a "picture-taking" film (Perutz Pergrano), rather than the usual Micro-File film which it is customary to use for such tests. (Films were developed in Perutz Perufin, diluted 1 to 5.) And both Dr. Edse and I felt that using Micro-File film could lead to a false evaluation of lenses, since it is not used for most ordinary shooting. Naturally, the following references to resolving power will be about half of what would be obtained with the higher resolving power film. So, don't take them as final figures of "obtainable" resolving powers. (For a practical example of the resolution of another "picture-taking" film, see p. 8—Ed.) Maximum resolving power is reached at about f/5.6 to f/8 on the 125mm. Hektor. The most critical focus was obtained at f/6.3.

In comparing the resolving power of the Hektor at f/2.5 and at f/4, Pergrano film indicates about 30 to 40 lines at f/2.5 (wide open) and about 40 to 50 lines at f/4. Naturally, this went up considerably at f/6.3. And keep in mind the test was not run on Micro-File film.

In checking the definition of the Hektor at openings smaller than f/8, I found very little loss of definition—and, no shift of focus. I should say here that it is not unusual to find this "shift" (as well as loss of definition) characteristic when stopping down lenses of this type. The Hektor's performance speaks well for its design and manufacture. There was no serious loss of quality at any aperture.

#### *Color Performance*

I have mentioned the superior definition and color separation not previously found in lenses of this type. I'm speaking of lenses of a triplet or modified triplet construction when used as long-focus large-aperture lenses. Earlier designs tended to be (compared to today's standards) slightly

soft with a slight color fringing, giving more of a blending of color, rather than the sharp demarcation between colors that the new Hektor gives. I recently worked with another make of wide-aperture long-focus lens, that in my own opinion does not have the sharpness and color quality of the Hektor. This is not necessarily troublesome when the aperture is stopped down. But, when you need to use it wide open . . . !

Although I have not tried it, I see no reason why the Hektor could not be mounted directly to the #11,075 Intermediate Collar, which is normally used to replace the Visoflex when using the 200mm. Telyt directly on Leica cameras. In this way, with an appropriate viewfinder, it should be ideal for sports photography. Naturally, I am not suggesting the elimination of the Visoflex, except in this case. For it is the Visoflex with the 125mm. lens that gives such extreme versatility and assures us of the composition and "selective focus" possibilities. By selective focus on the ground glass, we can easily control our "depth of field," concentrating on the center of interest and throwing the background out of focus.

To date, I have been concerned with the use of this lens, primarily for available-light work, where it is really outstanding. The fast f/2.5 aperture, coupled with its longer focal length, allows us to "grab" many of the difficult and many of the "impossible" shots, permitting the photographer to operate at a less obvious distance and still obtain a sizeable image on his film. Its use on my own story illustrations has given a roundness and depth perception that almost puts the viewer into the scene; it is the first means technically, that I have found, that makes it possible for the viewer of the finished photograph to feel the mood and some of the motion that was present when the picture was taken. This, in itself, is a great achievement. It has taken the "clutter" out of the picture story, that we formerly associated with flash, flood, strobe, light stands, cords, etc. The "click-stop" diaphragm helps too. You don't need to take your eyes off the subject to change openings.

The lens is self-contained for carrying. It screws into its own protective cap and the lens hood is reversed over the mount and then capped, forming a neat protective metal case. The lens construction itself is favorable to overall image correction even at the relatively large apertures. Its construction is the positive curvature; a curvature of one of the glass surfaces at the cemented interface of the center component; resulting in its superb definition and perspective.

After about 2000 photos with the 125mm. f/2.5 Hektor, I'm convinced that it fills my "in between spot." And it is rapidly replacing the use of my normal lens, due to the feeling of "depth perspective" it gives, and the ability to focus selectively.

*Ed. Note: Illustrations were furnished by the author to demonstrate types of picture situations in which Anscochrome is useful. They are not necessarily Leica photographs.*

# SOME PRACTICAL TIPS ON *Anscochrome*

## How To Get The Most From This New Film

**Kenneth S. Johnson**

Director  
Ansco News Bureau  
Binghamton, N. Y.

Until recently, color photography has been circumscribed by more handicaps than a thick-fingered pickpocket at a policemen's convention. Even though American color transparency films were probably the best the world could provide, they suffered certain drawbacks, not the least of which was insufficient speed. Even the Leica owner, with highly corrected superfast lenses, was often hard put to get decently exposed transparencies of poorly lighted subjects. And seldom, if ever, was he able to use the full potential of his high speed shutter for stopping motion in rapid-action subjects.

The difference between Ansco Color Film (Exposure Index 10) and new high speed Anscochrome (Exposure Index 32) is one measure of the progress color photography has made.

Dim light, a cause for serious concern with slower color emulsions, is no longer a problem worth worrying about. If the meter indicating needle moves off the pin at all, figuratively speaking, you can make a good hand-held exposure at  $f/2$ . With readings you might get outdoors in the shade or inside stores and offices lighted by fluorescent illumination, you can easily get good quality stop-action pictures on daylight type Anscochrome at  $1/100$  to  $1/250$  second at  $f/3.5$  or thereabouts. For fully sunlighted outdoor subjects, shutter speeds of  $1/500$  and  $1/1000$  second at  $f/4$  are now commonplace.

### *Minimize Camera Motion*

Higher shutter speeds not only minimize subject motion; they also help to overcome the un-



ANSCOCHROME, daylight type, is ideal for use with electronic flash illumination. In most instances you need no filter, although added "warmth" may be obtained with a UV15 or similar filter.

sharpness so often caused by camera movement at the moment of exposure. The obvious dividend here is greater image sharpness, even when transparencies are projected to full-screen dimensions.

Those who are technically inclined may raise the question of reciprocity failure and its possible effect on picture quality. Although reciprocity-law failure is a factor with *all* photographic emulsions, its effect with Anscochrome is so small that you can disregard it under all normal circumstances.

The greatly increased speed of Anscochrome also means, of course, that you can stop your lens diaphragm down farther, for greater depth of field. Admittedly, extremely small lens openings are not necessary to insure adequate depth of field in 35mm. work with lenses of normal focal length. But, you'll appreciate the added depth resulting from the use of small stops when making extreme close-ups, and under certain conditions, with long-focus and telephoto equipment.

To sum it up, you might say that the three-time increase in speed of Anscochrome brings unprecedented versatility to your Leica as a color camera. With it you can use the top shutter speed settings for stop-action transparencies of horse races, tennis matches and all manner of outdoor sporting events. You may use intermediate speeds and extremely small  $f$  stops—the essential combination for the finest nature photography in the field. And finally, you can use the wider lens apertures and slower hand-held shutter speeds for cloudy, overcast conditions, subjects in rather deep shade and interior subjects illuminated by daylight, or light of daylight color quality.





THE WIDE LATITUDE of new high speed Anscochrome color transparency film assures good rendering of detail from highlight to shadow. Color balance remains true in the shadow areas.

### Improved Color Quality

Speed, of course, is not all, by any means, and Ansco scientists, in writing and fulfilling the specifications for new high speed Anscochrome aimed for, and achieved, a considerable improvement in color quality. The former Ansco Color Film, despite its lack of speed, was recognized for its color fidelity in the blue, green and yellow regions of the spectrum. In addition, its soft scale of gradation made it a favorite with photographers who preferred to avoid overly saturated color reproduction.

In Anscochrome these advantages have been both retained and enhanced. There is the same delicate rendition of pastel colors (particularly in flesh and sky tones) and the extended reproduction scale which quite faithfully records a rather wide range of subject brightness.

Until now, however, every color photographer has had a quite legitimate reserve toward the way his color film reproduced the red tones of the subject. There were variations from one dye to another, but none seemed to even closely approximate the red tones of the original. In Anscochrome, the red problem has finally been licked, thanks to an entirely new manufacturing technology and a new approach to emulsion chemistry. The judgment of practical photographers is that the standard and quality of Anscochrome in reproducing reds are very high, indeed.

Those of you who are about to try your first magazine of Anscochrome will discover another attribute. It is the ability of the film to record shadow colors in a more lifelike manner. With

Ansco Color Film, deep shadow areas were not only dark, but their color tended to shift toward the blue. In Anscochrome transparencies shadow areas are, of course, dark, but there is no shift in color. Browns, greens, reds—retain their color. The scientists attribute this desirable characteristic to still another manufacturing improvement: better curve conformity. I am told that this means that the response of top, middle and bottom emulsion layers (to blue, green and red light respectively) is quite uniform. As a result there is no shift of colors.

As this is being written (in late June) Anscochrome is available in daylight type only. The emulsion is balanced for use outdoors in sunlight or indoors with blue flashlamps.

Most of the film used to date has been exposed (with excellent results) without filters of any kind. However, you who prefer to minimize the effect of atmospheric haze in high-altitude or over-water shots or the slight bluishness sometimes present in the shade or under overcast conditions may want to try an Ansco UV15 (or Leitz Skylight. Ed.) filter over the camera lens. You may want to use the same filter when exposing Anscochrome Daylight Type by electronic flash lighting.

It is likely that by the time you read these words Anscochrome Flash Type Film will also be available. This will be balanced for use with clear flashlamps.

Will high speed color transparency films replace their slower predecessors? As far as the average photographer is concerned, the preference for higher speed, higher fidelity color seems clear. At Ansco the decision is final. Ansco Color Film, a good product in its time, is no more. In its place is Anscochrome. We think you will approve.

### Quick Facts about Anscochrome Daylight Type High-Speed Transparency Film

#### Outdoor Exposures

Exposure index 32  
Basic exposure, average subjects, bright sun 1/100 at f/8

#### Indoor Exposures

With 6B or 26B lamp (polished reflector)

#### No Filter

Shutter speed	1/50	1/100	1/200	1/500	1/1000
Guide number	100	55	40	25	18

#### Processing

By user, with Ansco Developing Outfits  
By independent finishing laboratories  
By Ansco Laboratories, Binghamton, N. Y.

#### Prices

20 exposure 35mm. magazine	\$1.85 <sup>o</sup>
Easy Loader (Eight 20-exposure lengths, in disposable daylight-loading package)	\$9.95 <sup>o</sup>

<sup>o</sup>Prices do not include processing.

THE  
TWENTY-FIFTH  
ANNIVERSARY  
EXHIBIT  
OF



# ALFRED EISENSTAEDT

Minor White

Assistant Curator  
George Eastman House, Inc.  
Rochester, N. Y.

We hear their names, see the more famous names at the heads of articles occasionally. We see the photographs of the finest photojournalists a few at a time scattered in magazines or occasionally gathered together in a photo essay. So while their names are familiar, the photographer as a person remains nebulous, out of reach. He remains anonymous. Still this is not surprising. The credo of the photoreporter is to report what he sees without intruding his own personality into the pictures. Eisenstaedt is not the only photoreporter who has said the same thing. In fact, it is a mark of this kind of photographer to work as objectively as possible.

The best of them know that a man cannot leave himself out entirely, yet they hold as their ideal reportage of facts which circumscribe the significance of those facts. So it is not surprising that the public does not get to know the personality of the men and women who report the world to them. Nor is there more than rarely any opportunity for the public to get a glimpse of these personalities. Shows of their work are rare.

A show, however, is a wonderful way to meet the man behind the camera. I had this rare opportunity recently and was both amazed and delighted, pleased and enlightened.

## *Eisenstaedt—The Image And The Man*

After many weeks of catching Alfred Eisenstaedt on the fly in order to select examples of his work, I received a huge bundle of prints. During the many days it took to put them in final shape on the walls of the museum, I could feel myself becoming better and better acquainted with a new person. This man had acquired features, and a body, and a certain kind of mind and a wonderful kind of personality. But I must admit that when he bounced in from New York on opening night the man and my built-up picture did not match at all points. The real man is energetic, short, excitable, everywhere at once; the imaginary one was cool, calm, collected, sometimes short, some-

times tall and sometimes a veritable giant. The real man was warm, attentive, kindly and jolly; this aspect coincided exactly with the imaginary one.

The exhibit at Eastman House last winter in celebration of Eisenstaedt's 25th anniversary as a photographer contained some 260 prints. They represented his life as a photoreporter. The circulating exhibit, sponsored by both *Life* magazine and George Eastman House, is composed of some of the same prints. It is a fifty-panel exhibit with about 150 photographs.

You may wonder why I emphasize the personality of a photoreporter rather than the subject matter of his photographs. When a man's work which is primarily timely has ceased to be timely, other reasons enter to make it remain important. One of them is the personality behind the pictures. We can ask what kind of a man it is that has informed us of the world for 25 years and will continue, with luck, another 25. When we look at the pictures on the walls Eisenstaedt walks into the same room with us.

## ITINERARY

## EISENSTAEDT TRAVELING SHOW

Date	Place
Sept. 9-Oct. 2, 1955	Wadsworth Atheneum, Hartford, Conn.
Oct. 10-25, 1955	Institute of Contemporary Design, Boston, Mass.
Nov. 1-31, 1955	University of Maine, Orono, Maine
Dec., 1955	Philadelphia Museum School, Philadelphia, Pa.
Jan. 13-Feb. 22, 1956	Portland Art Museum, Portland, Ore.
May 10-24, 1956	Ohio University, Athens, Ohio
Aug. 1-31, 1956	Taylor Museum, Colorado Springs, Colo.
Oct. 1-30, 1956	Speed Art Museum, Louisville, Ky.
Dec. 1-31, 1956	Walker Art Center, Minneapolis, Minn.

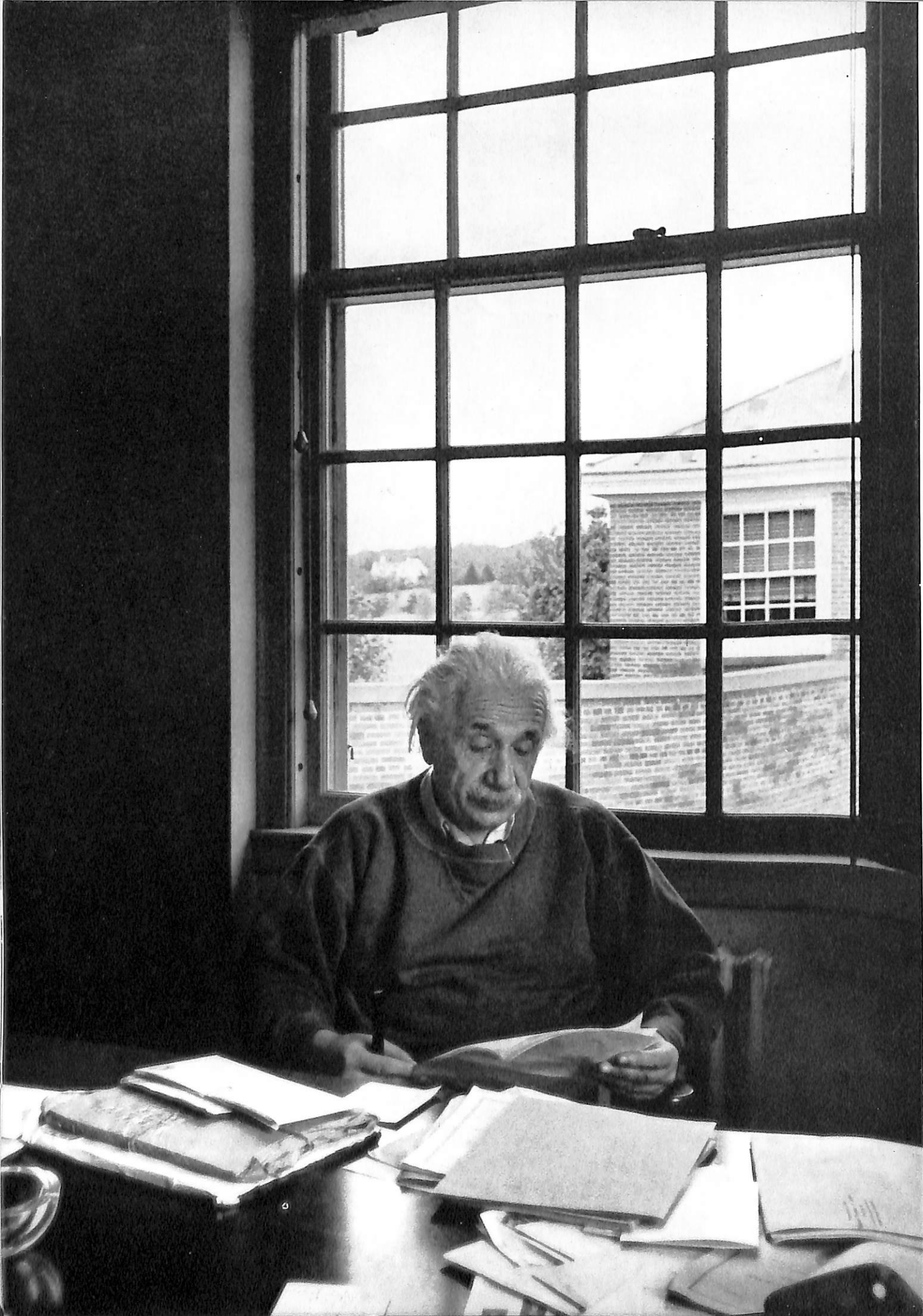
## SALON SECTION

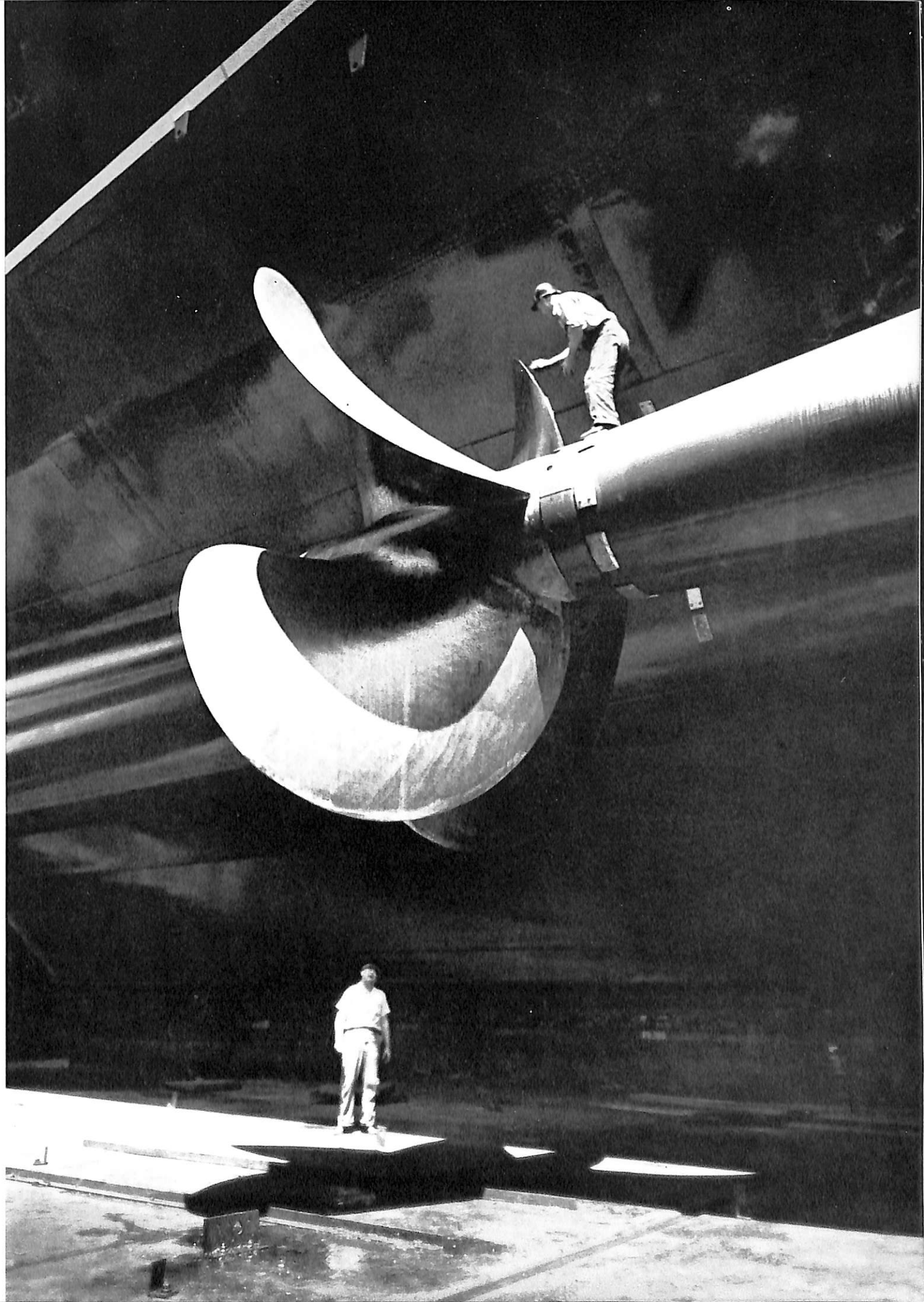
*Ed. Note: Since Alfred Eisenstaedt's work is done for magazines, his pictures do not have "titles." And we did not presume to add any just for conformity's sake. But we doubt if you will miss them, since each picture speaks for itself without need for assistance from words.*

1. 35mm. Elmar f/3.5, f/11 at 1/50th.
2. 35mm. Elmar f/3.5, f/4 at 1/4th.
3. 35mm. Elmar f/3.5, f/8 at 1/50th.
4. 35mm. Elmar f3.5, f/11 at 1/25th.















# NOW! LEARN "35mm. MAGIC" FROM WALTER BENSER



**Europe's  
Most Famous  
"Professional Amateur"  
To Tour The United States**

**Kenneth Poli**

Bayport, N. Y.

*The lights in the lecture hall dim. An air of expectancy hangs over the audience—especially those who have been to other lectures by the slim, dynamic man on the stage. At a signal, two 12-foot projection screens come alive with glowing color, and Walter Benser, Europe's most famous lecturer-photographer, begins to teach "35mm. Magic" to eager photographers.*

For more than twenty years, Walter Benser has taught the techniques of outstanding color photography to audiences all over Europe. He was one of the first instructors in the famous Leica School in Wetzlar, Germany. So widespread is his fame abroad that his every lecture is sold out. He must resort to multiple appearances in most cities to reach all who clamor to attend.

## *First Time In America*

So, there is excitement in photographic circles this year at the announcement of Benser's first scheduled nation-wide tour in America this Fall. He will teach advanced 35mm. techniques in 35 cities to an expected total of some 65,000 photographers.

Among the reasons for Benser's popularity abroad are his ready wit and his dramatic method of making a photographic point. Standing between two huge projection screens, Benser has his assistant throw a color shot on each screen at the same time.

On one screen, you see the scene as the average amateur might see and photograph it. Right next to it, you see the same scene improved by "tricks of the trade" into a memorable picture.

As picture after striking picture flashes on the giant screen, you learn the effects of exposure, of point of view, the influence of different colors in the scene. And lots more.

An evening of Benser is a condensed photo course leavened with laughter and an enjoyable lesson for Leica owners and their friends in the methods of a master photographer. His talks are especially valuable to amateurs, since he illustrates them with subject matter and techniques that are available to anyone.

## *How You Can Attend*

Walter Benser's tour in this country is sponsored by your Franchised Leica Dealer and E. Leitz, Inc. Look through the list of cities and dates to see when Mr. Benser will speak in your area. About a month before he is due in a particular city, Franchised Leica Dealers in that area will be ready to accept your request for a free admission ticket. Just drop in and tell your dealer you'd like to attend the Benser lecture, and he will see to it that you get a ticket.



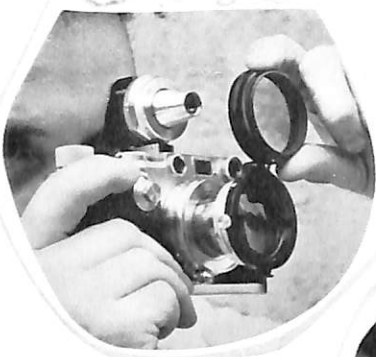
STRIKING CONTRAST between East and West was caught by Benser's quick eye and Leica on the beach at Tunis in N. Africa.

## **Walter Benser**

## **Itinerary**

Sept. 21	Reading, Pa.	Nov. 7	St. Louis, Mo.
Sept. 30	Hackensack, N. J.	Nov. 8	St. Louis, Mo.
Oct. 3	Hempstead, L. I.	Nov. 9	Kansas City, Mo.
Oct. 4	White Plains, N. Y.	Nov. 11	Denver, Colo.
Oct. 6	Boston, Mass.	Nov. 14	Los Angeles, Calif.
Oct. 7	Boston, Mass.	Nov. 15	Los Angeles, Calif.
Oct. 10	Providence, R. I.	Nov. 17	San Francisco, Calif.
Oct. 13	Rochester, N. Y.	Nov. 18	Oakland, Calif.
Oct. 14	Buffalo, N. Y.	Nov. 21	Oklahoma City, Okla.
Oct. 17	Pittsburgh, Pa.	Nov. 22	Dallas, Texas
Oct. 18	Columbus, Ohio	Nov. 25	New Orleans, La.
Oct. 19	Dayton, Ohio	Nov. 28	Birmingham, Ala.
Oct. 20	Cleveland, Ohio	Nov. 29	Atlanta, Ga.
Oct. 21	Cleveland, Ohio	Dec. 1	Richmond, Va.
Oct. 24	Detroit, Mich.	Dec. 5	Washington, D. C.
Oct. 25	Lansing, Mich.	Dec. 6	Washington, D. C.
Oct. 26	Detroit, Mich.	Dec. 7	Baltimore, Md.
Oct. 28	Glencoe, Ill.	Dec. 8	Philadelphia, Pa.
Oct. 31	Minneapolis, Minn.	Dec. 9	Philadelphia, Pa.
Nov. 2	Milwaukee, Wis.	Dec. 12	New York, N. Y.
Nov. 3	Chicago, Ill.	Dec. 13	New York, N. Y.
Nov. 4	Chicago, Ill.	Dec. 15	New York, N. Y.

Swing-out  
Filter is set visually,  
then swung back  
in front of lens.



# WIZARD

## OF THE GADGET BAG

### Polarizing Filter Has Many Talents

**Norman Rothschild**

New York, N. Y.

One of the most versatile tools that you can include in your Leica outfit is the Polarizing Filter. Once you have studied its uses and see what it will do for your pictures, both black-and-white and color, you will always want to have it with you when shooting pictures.

#### *Removing Reflections And Penetrating Haze*

The Leitz Polarizing Filter is useful in subduing or removing disturbing reflections from nonmetallic surfaces, such as glass, polished wood, water or similar subjects.

Not all reflections can be completely removed by the Polarizing Filter—only those reaching the lens from certain angles. However, it isn't necessary to measure these angles. By viewing the scene through the filter from the same angle as the lens and rotating it through an arc of 90



WITHOUT FILTER, reflections mask contents.

WITH FILTER, reflections are practically gone.



WITHOUT FILTER, sky shows little tone.

WITH FILTER, sky darkens dramatically.



degrees, you can see the exact effect.

In color photography, reflections from the sky, sun, and nearby objects often obscure the true underlying color of shiny subject matter, such as water, leaves, grass, flowers, and building roofs. Reflected skylight adds a bluish tinge to your subject. Removing surface reflections from subjects of this nature usually produces pictures with greater color saturation. (If you want the brightest, purest Autumn colors you ever saw in your slides, try using the Polarizing Filter.)

The Polarizing Filter cuts through distant haze by absorbing ultraviolet rays, and by subduing reflections from the water vapor of which haze is composed. Its haze-penetration property is generally quite a bit greater than when using a Leitz U.V. or Skylight Filter.

#### *Darkening The Sky*

Light coming from a blue sky on a clear day contains polarized light. With a Polarizing Filter you can cut out this polarized light and darken the sky in both color and black-and-white photography. In color photography the Polarizing Filter is the only one you can use to darken the sky, without distorting other colors in the scene. The effect on sky tones in black-and-white photography is roughly equal, at its maximum, to the use of a Leitz No. 1 Yellow Filter.

The greatest effect is on that area of the sky which is at right angles to the sun, since that area contains the greatest quantity of polarized light. Little or no effect takes place when you shoot directly into or away from the sun, or on days when the sky is gray or overcast.

In color photography many objects, such as flowers, buildings, and similar scenes, may be dramatized by photographing them against a blue sky that has been darkened by a Leitz Polarizing Filter.

#### *Types Of Leitz Polarizing Filter Mounts*

Leitz Polarizing Filters are supplied in two types of mount: the engraved mount, and the swing-out rotating mount.

The engraved filter is held in front of the eye and pointed at the scene to be photographed from the same angle and point of view as the camera lens. You then rotate the filter until you see the desired effect. Next, without changing the angle of rotation, note the number which is uppermost. Place the filter on the lens with this number rotated to the uppermost position.

In the revolving mount, swing-out model, the Polarizing Filter is first swung in front of the Leica Finder or in front of the Imairect as shown. It is then rotated until the effect desired is seen.

Always rotate the filter in a clockwise direction, so that it remains against the stop.

To make the picture, swing the filter in front of the lens. When swinging the filter in front of the lens use the finger grip provided. This will prevent accidental rotation of the filter.

#### *Filter Factor*

Although the Polarizing Filter has no color of its own, it does require an increase in exposure when used. This increase, or filter factor as it is called, can be attained in two ways. You can either open up the lens diaphragm without changing the shutter speed, or decrease the shutter speed, leaving the lens opening alone. Which you choose will depend on the individual picture.

Another way to allow for filter factor is to divide the film Exposure Index by the filter factor when you set your meter for an exposure reading. Thus, with a film index of 32 and a filter factor of 3X, you would set the meter index at 10.

For black-and-white photography, the Leitz Polarizing Filter requires an increase in exposure of three times. This increase in exposure is constant, regardless of the angle of polarization.

For color photography a factor of 3x is also required. This is quite a large factor and leads to the use of a large diaphragm opening when Kodachrome Film is used. Here the extra speed of the new fast color films is a distinct advantage.

#### *As A Neutral Density Filter*

Outdoors in bright light high speed films, such as Tri-X, may be overexposed even when the lowest stops and the highest shutter speeds are used. This is especially true when shooting marine, landscape, beach, or snow scenes where the light is unusually bright.

Of course, it would be desirable to switch to a slower film—in such situations, however, you may have to finish a partly exposed roll of fast film that has been used to make indoor or existing light pictures. (Incidentally, this is one reason for owning an extra Leica body.)

The Leitz Polarizing Filter, having no color of its own, can be used as a neutral density filter in such situations. Used this way, it cuts exposure but doesn't affect color rendition.

There are many other ways in which Polarizing Filters are valuable to science, medicine, and industry. But since these uses do not normally touch the everyday picture-taking experiences of most photographers, we will not explore them in this brief article. What we have tried to do here is to show you the versatility of the Polarizing Filter and how you can use it to make eye-catching pictures in both black-and-white and color.





# WITH THE BELLOWS DEVICE

**Accessory Helps You Master Photo Tricks**

**Joseph Foldes**

St. Petersburg, Fla.



Fig. 2

An article about Helen C. Manzer in the Spring Issue of LEICA PHOTOGRAPHY mentions that her favorite working equipment is the 135mm. lens with the Bellows and Reflex Housing. I have been using that combination for years and find it most satisfactory in practically all branches of photography. Besides being a versatile precision camera, the 135mm. lens with the Bellows and Reflex Housing enables you to take pictures that would be difficult to make with any other equipment of comparable size and features.

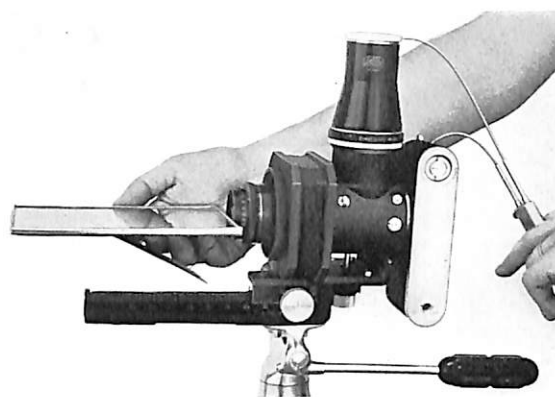


Fig. 1



Fig. 3

For instance, there are several photographic tricks which you can do easily with that combination of Leica equipment. You can take amazing pictures with the help of an ordinary hand mirror, about 4x6 inches in size, like those sold in the "dime" stores.

When you hold the mirror in front of your lens in a horizontal position, your pictures will appear to have been taken in a "flood." The subjects will be reflected in a pool of "water."

Fig. 1 shows the equipment used to make our



Fig. 4



Fig. 5

flood pictures. The mirror is held against the lens at about its center. The frame of the mirror does not interfere, but you can take it off, if you wish. Your hand blocks off the portion of the lens below the mirror, or you can paste a piece of black paper to the edge of the mirror for that purpose.

Check the effect in the Reflex Housing. Move the front edge of the mirror up and down slowly and watch the image. When the "flood" is just right, make the exposure. We photographed the scene in Fig. 2 without the mirror, then took

another shot with it (Fig. 3). The effect is quite real. You can even see the pavement through the shallow part of the water. The effect will be even better if you include a person or a car in the "flooded" scene (Fig. 4).

Be careful to hold the mirror horizontally from side to side, otherwise the vertical lines of the subject will appear to be tilted in the reflection (Fig. 5). You do not need a level to keep the mirror horizontal. Just keep the vertical lines of the subject vertical in the reflection.

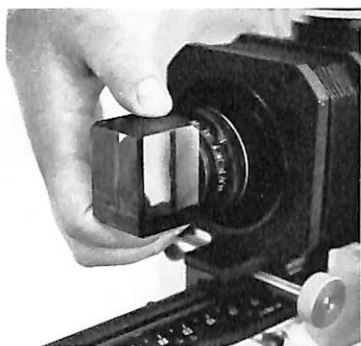
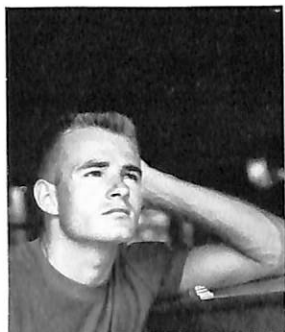


Fig. 6

SUBJECT No. 1



SUBJECT No. 2



Fig. 7

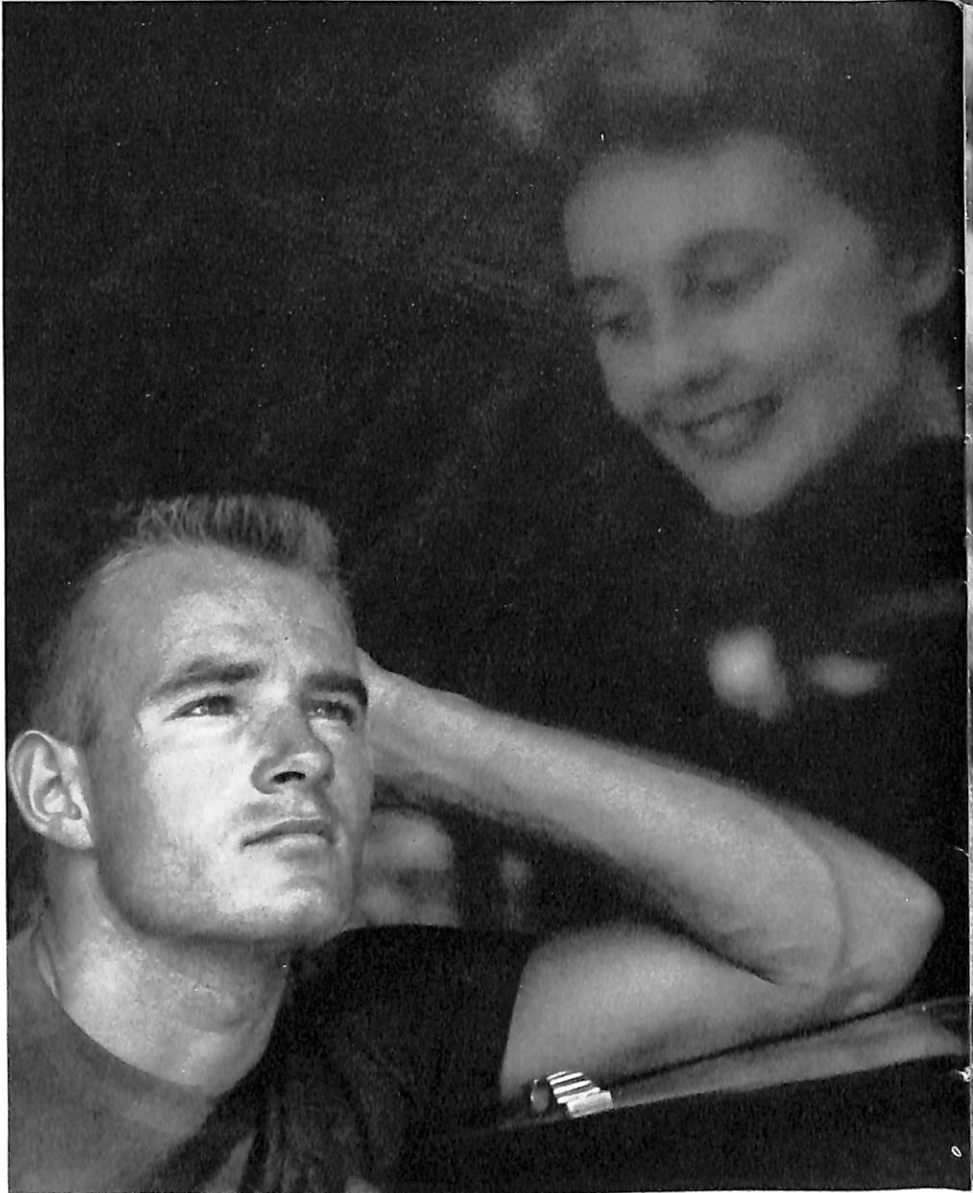
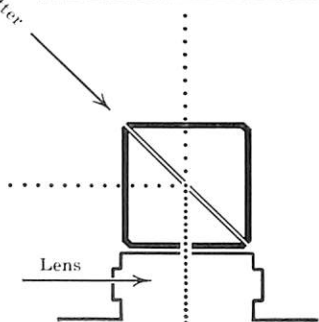


Fig. 8

The Leica has been built to prevent you from spoiling film by making double exposures. However, there are several ways to get a double image, if you want to do it. One is to use a so-called beam-splitter. This is a prism-like body of glass which "sees" in two directions at once—straight ahead and directly to one side. It is available from Edmund Scientific Corp., Barrington, N. J. You can also use a sheet of glass (about 4"x5" in size), but the beam-splitter is easier to handle.

When the beam-splitter is held in front of the lens (Fig. 6), you get two superimposed pictures: one of a subject that is in front of the camera, and another of one that is at the side at a 90° angle. Fig. 7 explains what happens. The image of subject #1 goes straight through, the image of subject #2 is reflected by a mirror-like surface inside the beam-splitter. The position of this mirrored surface can be seen on top of the beam-splitter in the form of a seam. Be sure that the position

of this seam in relation to subject #2 is as marked in the illustration. If subject #2 is placed on the other side of the camera, then the position of the seam should be just the opposite (turned 90° to the right).

Fig. 7 shows the two subjects that were combined to make Fig. 8. Note how subject #2 has been reversed in the final image. On the negative, both subjects are equally sharp. However, the girl is supposed to be a dream image, therefore, we diffused her by holding a piece of wrinkled cellophane over her part of the image during enlarging.

To get both subjects sharp, keep them the same distance from the camera. The image coming from the side will be weaker. If you want both to be of equal strength, give more light to the subject on the side. The subject in front of the camera will be stationary, but you can change the position of the side image by slightly tilting or turning the beam-splitter.



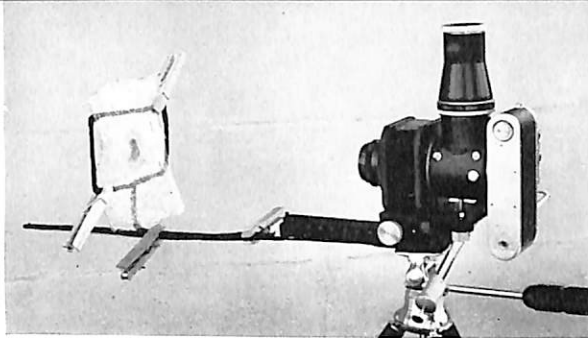


Fig. 9

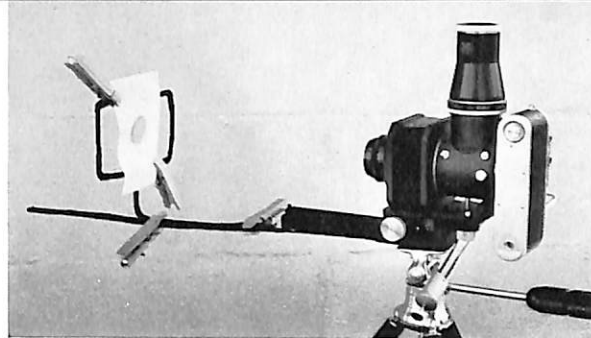


Fig. 12



Fig. 11



Fig. 10



Fig. 13



Fig. 14

Fig. 9 shows another little gadget that can help you to take unusual pictures. It is a homemade wire frame that consists of two pieces. A straight piece is attached to the camera somehow. Clothespins hold the other piece attached to the straight one. After you have bent them to shape, cover the wires with black photographic tape (sold in photo supply stores). This will prevent reflection from the wire, and will protect the camera from being marred.

In Fig. 9 a piece of wrinkled cellophane with a hole in the center is attached to the wire frame. The cellophane diffuses the image, except the part that is photographed through the hole. The degree of diffusion and the size and sharpness of the undiffused image can be controlled by the size of the hole in the wrinkled cellophane, by its distance from the lens, and by the lens opening ( $f$ : stop) used. Experiment a little and you will be able to control the effect accurately.

Figs. 10 and 11 were taken at the same time, of the same model. Fig. 10 is a straight shot, while Fig. 11 was photographed through a hole in the wrinkled cellophane.

The wire frame can also be utilized for another effect: to get a vignetted image. If you use a white paper with a hole instead of the cellophane (Fig. 12), the resulting picture will be vignetted, not diffused. This is useful if you want to eliminate part of the subject and its surroundings. Use a light background for a true vignetted effect. The young lady in Fig. 13 wore a bathing suit, while we wanted to take a more formal portrait of her. The wire frame with the white paper did the trick (Fig. 14).

Our examples show just one of the effects that you can get with each of the procedures described. With a little thinking and experimenting you will be able to utilize these "tricks" to make unusual pictures in a great variety.



**Fred Anderegg**  
Supervisor, Photographic Services  
University of Michigan  
Ann Arbor, Mich.

## WE TAKE 10 PICTURES A MINUTE



### Assembly-Line Shooting Speeds Identification Pictures

At the beginning of the Fall and spring terms, we photograph all students who do not have I. D. (identification) cards. This includes all new students as well as transfers, students who have changed their names (as a result of marriage) and/or addresses and those who have lost their old card. During the five days of registration, we are called on to photograph nearly 7000 students in the Fall and about 1600 in the Spring. Each morning, we deliver laminated I. D. cards, in alphabetical order, of all students photographed on the previous day. Throughout the school year we set up our equipment in our studio once a week to take the inevitable run-of-the-mine requests.

#### *"Specialists" Aid Production*

The mechanics are quite simple. It is of utmost importance that adequate space be found for the photographic operation and that the flow of students be uninterrupted. Our activity starts in the center of Figure 1. From another office the students have just received their basic cardboard I. D. cards typed with their name, address, and age. At our desks, they sign their cards and our "sign painters" print the student's name, school, and class with white chalk on a 4½" x 12" piece of heavy black paper. This black paper is held by a short piece of string attached to a clip at each end. The students, while placing the black card around their neck, proceed to the left and then to the rear of the room in back of the pillars and showcase to the "checker." The arrangement shown here is not ideal, since students in the right-hand line must cross through two lines of waiting persons. We plan to place the desks at an angle so the lines can flow between them.

The "checker" (Fig. 2, center) compares the name on the I. D. card with the signature and the printed name on the black paper. He writes, also in chalk, the film roll number in the upper left corner of the card. Our checker stands next to the

cameraman and is told of a change in roll so that he may change his numbering accordingly. After the student is photographed, he passes by our "bouncer" who directs him out, and takes his I. D. card. The "bouncer" places the cards in envelopes marked with the roll number. This greatly speeds matching picture and card later on.

#### *Shooting Is Simple*

A portable white window shade gives a light grey background suitable for this work. Two No. 4 flood bulbs in 16" reflectors supply the light. In our weekly setup, we use two RFL-2 bulbs on the subject and one on the background. The two 200 Watt clear bulbs over the sitter's head happened to be there so we brought them closer together and turned them on to give a few highlights in the hair. To keep focusing to a minimum, we keep the seat immovable. When we use an ordinary chair or stool, someone always kicks it in the rush of shooting, despite all warnings. We find the best solution is to use a full hypo barrel. For all our pictures we use but our one camera set-up consisting of a sturdy tripod, Leitz Bellows Focusing Device, Visoflex, 135mm. Hektor lens, and a Leica camera. Lead Photo.

We have made notches at regular intervals on the tripod extension legs. This simplifies extending all legs equally and levels the tripod head fairly well with the least amount of fussing. We actually have three or four cameras on hand, one in shooting position, one being unloaded and reloaded, and one or two at the ready. When approximately 34 exposures have been made, we don't dare take chances on pulling the end of the film out of its cassette (which we could easily do at the speed with which we wind the cameras). So we detach the cable release, quickly spin the camera off the Visoflex, spin another on, add the cable release, and resume shooting. This takes no more than 15 seconds.



FIG. 1. Nearly 7000 students must be photographed for identification each Fall at the University of Michigan.

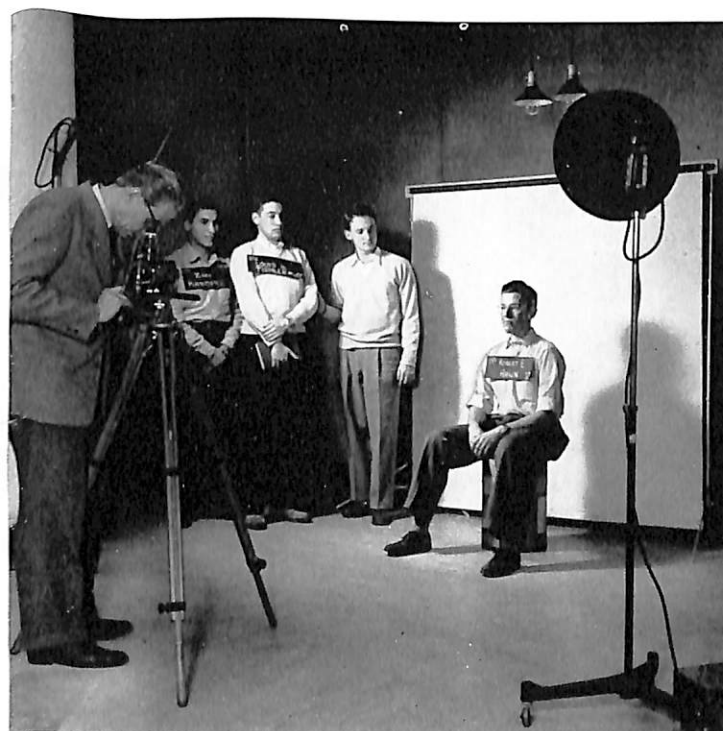


FIG. 2. One photographer can take 600 identification pictures in an hour with the set-up shown here.

FIG. 3. End result of the high speed "mugging" operation is this identification card which each student must carry.



A helper then rewinds the exposed film, places it in a numbered can, reloads the camera and checks it. Only one photo is made of each student unless, of course, an obvious error has been committed or the photographer realizes he has caught a "sleeper." It is interesting that the photographer must put tape on his winding fingers; he winds the camera so fast and often that otherwise he soon would wear the skin off two fingers! Unbelievable as it sounds, one photographer can easily shoot more than 600 students per hour.

### *Homemade Strip Printer*

Since grain size is unimportant (we make only contact prints) we use fast film, small *f*/stops and fairly fast exposures. We have been using Super XX film developed in D-76 with an exposure of 1/25 at *f*/12.5. In the Fall, we plan to use the faster Tri-X film. Rolls are developed normally and are printed in our homemade strip printer. It is made of  $\frac{3}{4}$ " thick hardwood with a printing window 1" x 60". Over this is a  $\frac{1}{4}$ " plate glass  $1\frac{5}{16}$ " wide by 61" long, beveled at each end. The film is placed on this glass and tucked into a slit at each end of the printing frame. A strip of 35mm. paper is placed over the film and also tucked into the end slits. The sandwich is pressed down by a hinged three-piece pressure plate. Each section has a rather strong piece of spring steel to hold it tightly in position. The pressure plate sections are faced with a  $\frac{1}{8}$ " thick layer of sponge rubber. We make four prints of each roll on F-2 paper. For light source we use a No. 1 flood bulb in a bare ceiling fixture. Exposure is approximately 3 seconds.

### *Finishing Touches*

After the prints are dried, we separate them according to roll numbers. One of the four strips is immediately cut into individual prints. The "sorter" lightly scotch tapes the proper picture on the proper card. The card then goes into a previously prepared plastic sandwich which is then laminated. Bear in mind that each person who handles cards or pictures always checks to see that names match. After lamination, the cards are alphabetized, trimmed, and corners rounded. Personnel from this department cut the extra print rolls into individual pictures and sort them according to requirements. The finished I. D. card is shown in Fig. 3.

By using the Leica camera and related equipment we have reduced the number of camera stands from twelve to one, and the student help from 44 to 8. We have greatly simplified the flow of students through the photographic portion of their registration, lowered operating costs materially, and raised the quality of the photographs.



## SIDE LEITZ



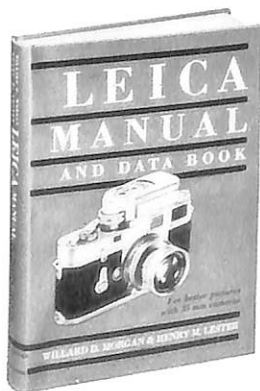
**Enthusiasm.** Naturally we're enthusiastic about the Leica and our fellow Leica users. But in our Summer issue our enthusiasm permitted us to let an overenthusiastic statistic sneak through. We said there were three-quarters of a million Leica owners in the country. Should have said one-quarter of a million.

**Oblate Spheroid.** What happened to the sun on our cover? Its squunched-down look has nothing to do with lenses or cameras. And Alfred Eisenstaedt's picture-taking abilities are second to none.

The flattened poles are the result of varying refraction by the earth's atmosphere of the light from the setting sun. Because of this refraction, heavenly bodies appear somewhat higher above the horizon than they actually are. And the nearer they are to the horizon, the greater the upward displacement. In a large disc like the sun, the lower edge at sunset appears 35 minutes of arc higher than in actuality, while the upper edge (which is further from the horizon) looks about 29 minutes higher.

The result, due to the greater density of the lower layers of air, is the flattened look we see in the sun on our cover.

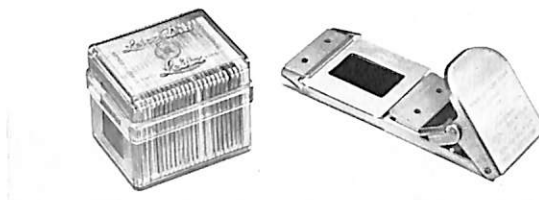
**New Leica Manual.** When (or shortly after) you read this, a brand-new edition of the "Leica Manual" will be available through your Franchised Leica Dealer. The new book is probably the most inclusive of the series, as evidenced by its title "Leica Manual And Data Book."



In addition to 14 chapters on Leica cameras, accessories and techniques, the new volume will carry pictures and descriptions of every Leica model ever made—a handy reference and checklist. What's more, a special appendix carries complete information on Flash Guide Numbers with the Leica and Leica flash equipment. These tables were computed especially for this book and are most complete and up-to-the-minute.

This latest and most complete edition of what has become a standard reference for Leica owners has more than 400 pages; price: \$6.00.

**New Slide Mounts.** Next time you visit your Leica dealer, ask him to show you the new Pro-Color transparency mounts. Very precisely made, the Pro-Color binders feature uniformly thin cover glasses and metal cover frames. They come in boxes of 25, along with five extra metal covers which you can use if at some time you need to rebind a slide. A self-sticking label for each mount helps you with identification of your slides. Anti-Newton's Rings masks are available separately.



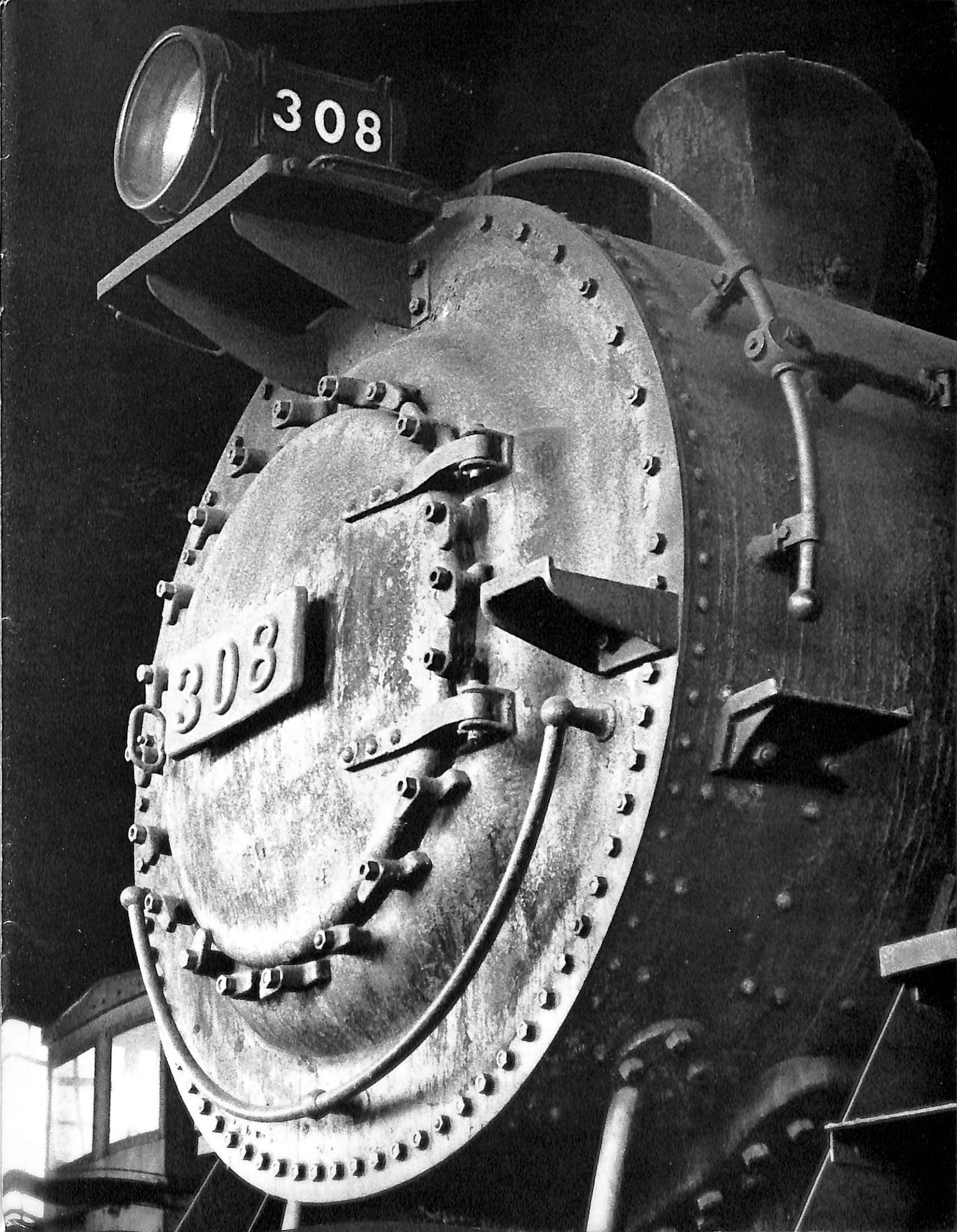
But what speeds up your binding operation most is the special Proloc quick-fastener. You just slip the assembled slide-mount "sandwich" into the Proloc and two quick pressures seal it tightly.

Pro-Color slide mounts, 25 in a plastic box, cost \$3.00. The Proloc quick-fastener is \$1.50 and the anti-Newton's Rings masks are \$1.20 for 50.

**Braun Hobby Note.** When you buy a Braun Hobby Electronic Flash wet-cell power unit, you will find the voltage selector set for 125 V. This is the proper setting for almost all circuits in this country. Although nominally rated at 110 volts, most domestic circuits are subject to variations, both above and below this figure. If you switch the selector to its 110 volt setting, the precisely made fuse in the circuit will blow if current surges above this figure even for a split-second.

**New Book.** "Dive — The Complete Book of Skin Diving" by Rick and Barbara Carrier. If you have been wondering just what appeal the sea bottom has for so many people these days, this is the book to tell you. Nearly every angle of skin diving is discussed and illustrated by photos (many are Leica shots) or the authors' drawings. The physiology of diving, underwater photography, equipment data, safety—even the history of man's efforts to conquer the underwater world are discussed in authoritative detail. And you'll enjoy the chapter on sunken treasures and cities under the sea. Wilfred Funk, Inc., \$4.95.

**Rusty 308** by John Dockendorf. Leica IIIf, Elmar 50mm., f/16 at 1 second on Ilford HP3.



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**BRAUN**  
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**Three Power Sources**—Works on dry cell, A.C. or combined A.C. and wet cell. Same lightweight "Polyamid" case houses either power source.

Dimensions	8¾" x 7½" x 2½"
Watt Seconds	100
Guide Number	Daylight Kodachrome—50 ASA 100 films —185
Flash Duration	1/1000th second
Number of Flashes per Battery	Dry Cell—750 or more Wet Cell— 80 per charge
Accessories Available	Connecting cords for various cameras, extension units, camera brackets
Weight with Dry Cell	5 pounds, 2 ounces

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